wherein a concentration of carbon is at 3×10^{17} atoms/cm^3 or less in said semiconductor film after the step.

2. (Amended) A method of manufacturing a semiconductor device comprising the step of:

ion-doping an impurity element into a channel region,

wherein said impurity element imparts n-type conductivity or p-type conductivity to said semiconductor film,

wherein a concentration of said impurity element is in the range from 1×10^{15} to 5×10^{17} atoms/cm^3 in said semiconductor film after the step, and

wherein a concentration of nitrogen is at 1×10^{17} atoms/cm^3 or less in said semiconductor film after the step.

A1 amended

3. (Amended) A method of manufacturing a semiconductor device comprising the step of:

ion-doping an impurity element into a channel region,

wherein said impurity element imparts n-type conductivity or p-type conductivity to said semiconductor film,

wherein a concentration of said impurity element is in the range from 1×10^{15} to 5×10^{17} atoms/cm^3 in said semiconductor film after the step, and

wherein a concentration of oxygen is at 3×10^{17} atoms/cm^3 or less in said semiconductor film after the step.

A2 amended

13. (Amended) A method of manufacturing a semiconductor device comprising the step of:

ion-doping an impurity element into a channel region,

wherein said impurity element imparts n-type conductivity or p-type conductivity to said semiconductor film,

wherein a concentration of said impurity element is in the range from 1×10^{15} to 5×10^{17} atoms/cm^3 in said semiconductor film after the step, and

wherein a concentration of hydrogen is at 1×10^{19} atoms/cm^3 or less in said semiconductor film after the step.

A2 cncld

14. (Amended) A method of manufacturing a semiconductor device comprising the step of:

ion-doping an impurity element into a channel region,

wherein said impurity element imparts n-type conductivity or p-type conductivity to said semiconductor film,

wherein a concentration of said impurity element is in the range from 1×10^{15} to 5×10^{17} atoms/cm^3 in said semiconductor film after the step, and

wherein said impurity element is doped into said semiconductor film by using a source material gas containing said impurity element diluted with hydrogen to the concentration in the range from 0.5% to 5%.

REMARKS

The Examiner's Office Action of October 10, 2002 has been received and its contents reviewed. Applicants would like to thank the Examiner for the consideration given to the above-identified application. Accordingly, Applicants respectfully submit that this response is being timely filed and fully responsive to the Office Action.

Claims 1-14 are pending in the present. By the above amendment, claims 1-3, 13, and 14 have been amended. Applicants respectfully contend that no issue of new matter is presented by the aforementioned amendment that would require further consideration and/or search by the